ABSTRACT

Disclosed is a method for calculating a routing cost or a hop count of a mobile IP (Internet Protocol) in an IP network. The IP network can communicate with the MN having a mobile IP and includes a plurality of access routers. If the MN moves to a

5 new access router, the MN generates a distance measurement request message and transmits the generated distance measurement request message to an access router serving as a regional anchor point (RAP) of the MN. Upon receiving the distance measurement request message, the access router serving as the RAP generates an acknowledgement message having an initial hop limit field value and a hop limit value,

10 and transmits the acknowledgement message. The MN calculates a hop count using the initial hop limit field value and the hop limit value.